

OBJECT-ORIENTED ANALYSIS AND DESIGN

THREE DAYS

Prerequisites

- Knowledge of and experience in an object-oriented programming language such as [C++](#), [Java](#) or Smalltalk
- Course 960, *Object Technology Overview*, or an equivalent understanding of the following: concepts such as class, instance, encapsulation, inheritance, polymorphism, and interface

Who Should Attend

This class is intended for students who have some knowledge of object-oriented concepts and programming and who want to learn more about designing a system using OO principles. A full transition into OO does not happen in a single course, but this class and its approach will assist the student in making the conceptual transition more rapidly.

Course Description

Object-Oriented Analysis and Design takes students through the process of designing an object-oriented application that moves from requirements gathering and planning to analysis and design and finally to coding. The methodology used is based on Booch and uses the Unified Modeling Language (UML) notation and application of patterns. Rational Rose is the software tool used to demonstrate certain aspects of the design process. Each phase of the project lifecycle is explored using a case study application, including two iterations through the analysis and design phases. Students will learn how to use various diagrams and forms of documentation to flow through each phase, including use cases, class diagrams, collaboration diagrams, and development of a conceptual model including associations and attributes.